

CLAIMS

What is claimed is:

- 5 1. A transgenic animal having a genome, said genome comprising a heterologous nucleic acid sequence encoding a growth factor and encoding alpha-lactalbumin operably linked to a mammary preferential promoter, wherein descendants of said transgenic animal express an increased amount of growth factor in their milk and an increased amount of alpha-lactalbumin in their milk as compared to control non-transgenic animals.
- 10 2. The transgenic animal of Claim 1, wherein said growth factor is selected from the group consisting of insulin-like growth factor I, insulin-like growth factor II, epidermal growth factor, platelet-derived growth factor, fibroblast growth factor, and transforming growth factor.
- 15 3. The transgenic animal of Claim 2, wherein said insulin-like growth factor I is selected from the group consisting of human, porcine, and bovine insulin-like growth factor I.
- 20 4. A transgenic animal having a genome, said genome comprising a heterologous nucleic acid sequence encoding a growth factor and encoding alpha-lactalbumin operably linked to a mammary preferential promoter, wherein descendants of said transgenic animal express an increased amount of growth factor in their milk and an increased milk volume as compared to control non-transgenic animals.
- 25 5. A method of increasing the volume of milk and the growth factor content of milk in transgenic animals, said method comprising: providing a transgenic animal having a genome, said genome comprising a heterologous nucleic acid sequence encoding a growth factor gene and encoding alpha-lactalbumin operably linked to a mammary preferential promoter, wherein said transgenic animal expresses an increased amount of growth factor in its milk and an increased milk volume as compared to control non-
30 transgenic animals.